

Information Bulletin

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Title: Inadequate Document Review Leads to Errors in Transportation Safety Basis

Date: August 28, 2006

Identifier: 2006-RL-HNF-0038

Lessons Learned Summary: Facility personnel discovered that the frequency analyses for two drum shipment payloads were based on the wrong Transportation Safety Document's bounding frequency values. Subsequently, appropriate compensatory measures were taken and an Unreviewed Safety Question Evaluation was initiated and determined to be positive. Immediate and long term actions are being taken to correct this issue. Immediate actions were put in place to limit miles shipped and track miles shipped to ensure that the limit is not exceeded until the comprehensive revision to the transportation safety documentation is completed.

Discussion of Activities: The "Safety Analysis Report for Packaging (SARP) (Onsite) Steel Drum," compares accident frequency and risk estimates for the shipment of drums in the 100/200 areas to values from the "Hanford Sitewide Transportation Safety Document (TSD)". However, it was discovered on January 5, 2006 that values for the 300 Area were used instead of values for the 100/200 areas in the SARP. When discovered it resulted in the identification of a Positive Unreviewed Safety Question for Transportation.

Analysis: Errors introduced into the SARP in August 2003 as part of revision to the document, were not detected by the review process. The revision to the SARP was performed by the same subcontractor personnel who performed both safety basis analytical work and the review work. Because the personnel were already very familiar with the analysis they did not re-examine the calculations "from scratch" for the review. Subsequent revisions and associated reviews of the SARP also did not detect the error. While reviewers were independent, in the sense that people were not assigned to review their own work, they were familiar with the document from having reviewed it at various stages of its development. A truly objective review, by a "new set of eyes," was what eventually discovered the error.

Recommendations/Actions:

The SARP will be revised or replaced to be consistent with the current TSD requirements. A contract change was issued to separate the work scope. This action addresses the root cause by establishing a control to ensure that review of documentation generated by the subcontractor takes place.

Cost Savings/Avoidance: Not determined

Work Function: Packaging and Transportation

Hazards: Hazardous Materials - General

Keywords: Authorization Basis, Conduct of Operations - Conduct of Operations (miscellaneous), Conduct of Operations - Safety Analysis/USQs, Other - Inadequate Design

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References: RL--PHMC-GENSERVICE-2006-0001

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